DOCUMENT RESUME

ED 429 512 HE 032 004

AUTHOR Dennis, Kay S.
TITLE Fostering Student Adjustment to Medical School: Evaluation of One Innovative Curricular Approach.
PUB DATE 1998-04-00
NOTE 22p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Diego, CA, April 13-17, 1998).
PUB TYPE Reports - Evaluative (142) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adult Education; Cooperative Learning; *Curriculum Development; Faculty Advisers; Focus Groups; Higher Education; Humanistic Education; Leadership Training; Medical Education; *Medical Students; Professional Development; Program Effectiveness; Program Evaluation; School Counseling; Socialization; *Student Adjustment; Student Attitudes; Student Development; Student Needs; Student School Relationship

ABSTRACT

This study evaluated an innovative curriculum for first-year medical students which was designed to render the undergraduate curriculum more humanistic in socializing students into medicine. The Personal, Professional, and Leadership (PPL) development program provides guided, semi-structured opportunities to create "communities of learning" by forming heterogeneous groups of nine students who meet regularly with volunteer faculty facilitators throughout the four-year curriculum to explore personal, professional, and leadership development in the practice of medicine. The evaluation was conducted with the third cohort of students in the program and involved focus groups comprised of two students from each of eight PPL groups. Analysis of focus group interview data identified three major themes: (1) PPL participants found social support; (2) PPL participants found academic support; and (3) PPL participants struggled with unmet adult learning needs. A questionnaire completed by the 12 of the 16 faculty facilitators indicated that respondents felt the program was generally effective and fostered peer support and a sense of community. Overall, analysis suggests that although the PPL program provides important benefits to first-year medical students, it lacks several elements fundamental to adult education programming, such as a needs assessment and attention to the special needs of introverted students. (Contains 16 references.)(DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 429 512

Fostering Student Adjustment to Medical School:

Evaluation of One Innovative Curricular Approach

Kay S. Dennis

East Carolina University

Presented at the Annual Meeting

American Educational Research Association

BEST COPY AVAILABLE

San Diego, April, 1998

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ME 0332 004

Kay S. Dennis

Fostering Student Adjustment to Medical School:
Evaluation of One Innovative Curricular Approach

Introduction

The granting of a medical degree to a student certifies that the student has met certain basic standards of knowledge, skills, and professional behavior, and is qualified to assume the responsibilities of post-graduate residency training. In recent years, however, many questions have been raised about the professional attributes of medical school graduates (McKegney, 1989; Stillman et al., 1990). Do these new physicians exemplify traits which engender trust and respect? In addition to their clinical knowledge and skills, do they possess the professional and personal qualities valued in a medical practitioner? Health care today is radically different from the traditional, pre-1990s model -- the emerging health care system is characterized by greater individual responsibility for health, more intensive use of information and coordination of services, increased expectations of physician accountability, and a heightened focus on patient-physician partnerships in decisions related to care and treatment (O'Neil, 1993). The result is that physicians today need a number of non-cognitive skills in order to be maximally effective.

These non-cognitive attributes, however, are rarely dealt with in medical education. Medical educators typically focus upon student mastery of cognitive knowledge through written examinations during the first two years of highly structured basic science study. Diagnostic reasoning and clinical skills are addressed in the less structured environment of third year clerkships. Communication skills, integrity, caring and respect for others, maturity, responsibility, self-awareness, and commitment to continuous professional development are addressed minimally if at all (Phelan, Obenshain, & Galey, 1993). Yet these attributes are increasingly relevant.

Computing technologies are perceived by many as a threat to the survival of a human interface which traditionally played a fundamental role in patient/care provider relationships (O'Neil, 1993).

Further, the atmosphere in which medical students learn to become physicians resembles military boot camp (Puckett, Graham, Pounds, & Nash, 1989). Students describe losing their sense of self and their personality in the long hours of studying, and feeling as if they had been held under water, unable to gasp for air until a set of examinations was past. Medical education is a grueling experience, and few complete it without emotional scarring (Dickstein & Elkes, 1987). Although students pursue medicine in order to help people, in most medical schools initial patient care is administered to a dead person. First year students are required to begin dissecting a human cadaver in their first week, a jolting, shocking experience, usually performed without adequate psychological preparation (Virshup, 1985; Horne, Tiller, Eizenberg, Tashevska, & Biddle, 1990; Coulehan, Williams, Landis, & Naser, 1995). In short order most medical students realize that they have entered a totally new, frightening, confusing world and they are expected to assimilate its culture with stoic acceptance.

Chronic stress and maladjustment hinder the success of a sizable number of medical students, who frequently refrain from disclosing their problems (Dickstein & Elkes, 1987). Moreover, by graduation students have learned that offering compassion and sensitivity to patients can be painful. For example, students may be hurt when a patient they have come to know spurns their caring gestures, or dies. As a result, students sometimes forge walls between themselves and patients, extending a pattern of emotional isolation.

Personal and Academic Difficulties

The stress of medical school may cause other personal and academic difficulties. With the tremendous amount of factual and conceptual material to be absorbed in a brief period of time and

the self-imposed pressure to attain the highest rank among the class in order to obtain the "best" residency bid, some medical students succumb to the temptation to cheat. Cheating and other forms of dishonesty lead to a loss of moral values, rendering students unprepared for the moral and ethical decision-making inherent in the practice of medicine (Puckett et al., 1989; Brown, Edwards, & Rounds, 1992; Crandall, Volk, & Loemker, 1993). Many students in need of help turn to alcohol or other substances as a means of coping. Some develop high blood pressure, depression, marital problems, or other risks to physical and emotional health (Dickstein & Elkes, 1987; Puckett et al., 1989). Medical students frequently find that some of their deep-seated values and beliefs either do not work in medical school or are in conflict with those of the school, their peers, or their patients. Such dissonance can result in serious difficulties in dealing with others (Virshup, 1985; Plaut, Maxwell, Seng, O'Brien, & Faircloth, 1993). With the increasing diversity of students at many medical schools, students frequently sit alongside peers who have very different views on many issues. For example, a student who longs to have a family but must delay pregnancy in order to complete school may be inclined to criticize a fellow student or patient who chooses abortion for the sake of convenience. Yet educators have been slow to develop programmatic approaches to help students understand and appreciate diversity.

The personal and professional attributes expected of physicians do not evolve simply because a person selects medicine as a career. In order to deal effectively with others, a future physician first must deal effectively with self. To do so requires awareness and acceptance of strengths, limitations, biases, values, and needs. Yet not everyone comes from a background that fosters such awareness and acceptance. They must be cultivated. Unfortunately, the self-esteem of some students is so low that their ability to relate to others is seriously impaired.

Even if a student enters medical school with ego intact and humanistic attributes, the realities of medical school can erode these, along with the student's sense of emotional security. Beginning students do not comprehend the vast differences between undergraduate education and medical school. They may bring unrealistically high expectations of their own performance. Feelings of fright and inadequacy overwhelm them -- and they are sure other students are not experiencing the same anxieties (Coleman, 1985). Some of the most academically gifted students, before the end of their first year, find themselves wondering why they ever thought they could or should pursue medicine. Without a continually bolstered inner sense of safety and security, meaningful interaction with others and academic success are difficult, if not impossible to achieve.

An Innovative Curricular Approach to the Problem

As a result of widespread concern about the dehumanizing nature of medical education and increasing demands by the public for greater accountability on the part of physicians, a number of medical schools have established personal health awareness workshops (Dickstein & Elkes, 1987), programs on humanistic values (Puckett et al., 1989), counseling programs (Davies, Rutledge, & Davies, 1993), programs on stress and adaptation (Barton,1995) or courses in professional development (Swick, Simpson, & Van Susteren, 1995), to help their students develop desirable attributes and cope with stress. These activities vary in their length, intensity, comprehensiveness, and inclusion of faculty as mentors or facilitators. This paper reports on a curricular enhancement instituted for first-year students at one medical school to foster their personal, professional, and leadership development. The medical school is located in a small city in the southeastern United States. Over the past several years, faculty at the medical school have observed that somewhere during a four-year course of study, a significant number of students seemed to lose their altruism, commitment to community service, and zeal for learning. Individual

and competitive concerns overshadowed shared, cooperative activities. Students showed less interest in the concerns of patients or societal health needs. Some abandoned their plan to pursue a generalist practice in family medicine upon realizing the practical and fiscal implications of a large indigent population in need of health care. Instead they puzzled over which subspecialty would offer the best package of financial rewards and scheduling flexibility.

Troubled by these trends, faculty and administrators sought a means of rendering the undergraduate curriculum more humanistic in socializing students into medicine. In 1994 the medical school established the Personal, Professional, and Leadership (PPL) Development Program for its entering students to create a climate of emotional safety, social support, and affiliation among students (and between students and faculty). The faculty and staff who developed the program recognized that not every group or "community" (whether a village, a medical school, or a gross anatomy laboratory) is a caring, supportive community conducive to personal and academic fulfillment. Regardless of their age, family status, and sociocultural and academic backgrounds, students generally find medical school to be much different from and far more challenging than they had anticipated. Some kind of overarching, administrative support and guidance are needed to establish a sense of community in a setting characterized by heavy academic competition and repeated assaults on students' sense of self.

The PPL program, which is compulsory for all first-year students (72 per year), provides guided, semi-structured opportunities to create "communities of learning" through forming heterogeneous groups of nine students each, who meet regularly with volunteer faculty facilitators throughout the four-year curriculum, to explore personal, professional, and leadership development in the practice of medicine. The PPL program is a synthesis of similar programs offered by other medical schools, and relevant literature.

Goals of the Program

Program goals are to:

1. Help students feel supported and secure from the start of their medical education.
2. Establish a network of faculty and peer support and collaboration, and thus provide a model for support and collaboration applicable to medical practice.
3. Provide a safe, supportive climate for students to learn about self and others.

The PPL program emphasizes faculty-facilitated group activities which commence during the first week of school. The intensive orientation week includes a range of activities such as a workshop on the Myers-Briggs Type Indicator, small group exercises in which students take turns describing one personal characteristic or an external obstacle that had to be overcome in order for them to become a medical student, and a trust-building outdoor "ropes" course. Near the close of the week, some groups choose to share further about themselves, citing one strength they have to offer their PPL group that might make the medical education journey a little easier, and one area of personal development or need they have which they hope their PPL group members can help with or meet in order to make the journey a little easier. After the first week the student/faculty PPL groups continue meeting, usually with a less structured agenda. Groups get together for seminars on topics such as coping skills, group process, and diversity; social gatherings which sometimes include families; and occasional meals for PPL members only. While the groups are urged to continue meeting, groups are free to make their own rules and decide whether to have mandatory or optional participation. Some groups decide to meet faithfully but on a voluntary basis after every set of examinations. Meetings occur at school, and in restaurants, parks, the bowling alley, or the pool hall.

When the PPL program was initiated in August 1994, some faculty members expressed concern about the amount of time it would take away from other important activities. During the first year of implementation the program was criticized by some faculty for two reasons: (1) it "coddled" the freshmen and (2) it required too much time (three-hour dinner meetings each week) following an orientation week which was almost totally committed to PPL activities rather than academic work. (Following the first year of the program, some PPL groups shifted toward meeting weekly at lunchtime.) Some faculty also expressed concern about the hours required for the group facilitator training workshop which was deemed an important dimension of the program.

The students who participated in the first year of the project also expressed reservations about it initially, for they were unsure whether its benefits would outweigh the cost in time taken from study or other obligations. However, school administrators were committed to the program and therefore expressed a desire for data to determine the most effective and efficient means of operating the program.

The Research Study

The purpose of this study therefore was to examine the effectiveness of the PPL program in enhancing student adjustment to medical school, and fostering student development and professional socialization. The study, which followed two years of similarly-structured preliminary studies, was conducted with the third cohort of students to receive the program. The research questions were:

1. How do PPL program participants describe their adjustment to medical school?
2. How do PPL faculty facilitators describe adjustment by PPL participants?
3. How do PPL program participants describe their awareness of diversity issues?

4. How do PPL faculty facilitators describe awareness by participants of diversity issues?

5. How do PPL program participants describe the effectiveness of the program in fostering communities of learning about self and others?

6. How do PPL faculty facilitators describe the effectiveness of the program in fostering communities of learning about self and others?

Student Participants

Implementation of the third iteration of the program in 1996-1997 again involved dividing the entering class of 72 students into eight groups of nine students each, with attention to diversity in age, race, and gender. In order to elicit student perceptions of the most helpful and least helpful aspects of the program, focus groups were conducted early in the second semester during 90-minute luncheon sessions at the school. Using a random number table, two members were selected from each group and asked to participate in one of two focus groups scheduled for consecutive Fridays. Thus the student sample numbered 16 students. All participants signed informed consent forms. A semi-structured interview format was used, with participants having a list of general questions in front of them during the period. Sample questions included:

1. How did the realities of medical school match your expectations of it?
2. Did the PPL program influence your feelings? How?
3. How would you describe early interactions with your fellow students? Did PPL help?
4. Which PPL events or activities were especially meaningful for you, and why?
5. Has the program been a factor in handling the demands of school? How?
6. How would you describe early interactions with faculty facilitators of PPL?
7. Has the PPL program made a difference in how you view yourself? How?
8. Has the PPL program made a difference in how you view others who differ from you?

Both focus groups were audiotaped. The researcher transcribed the tapes and provided the material to the participants for verification. The researcher then analyzed the transcripts for recurrent key themes. A second data analyst compared her interpretation and themes with those of the researcher.

The demographic composition of the focus groups was reflective of the student body at the medical school. Focus group #1 included four men and four women. Six students were Caucasian, two were minorities; and one student could be considered non-traditional in that he was several years older than the others. Focus group #2 included three men and five women and otherwise was configured exactly like focus group #1.

Major Themes

Analysis of data yielded three major themes and several sub-themes from the experiences of PPL program participants as described by the focus group respondents. Major themes are that: (1) PPL participants found social support; (2) PPL participants found academic support; and (3) PPL participants struggled with a number of unmet adult learning needs. The following section details each of the major themes and provides examples of statements by students.

Theme #1 -- PPL Participants Found Social Support

- Needs for socialization
- Feeling support
- New insights
- Diversity
- Behaviors of faculty facilitators

Theme #2 -- PPL participants Found Academic Support

- Stress coping
- Crisis intervention
- Teamwork
- Behaviors of faculty facilitators

Theme #3 -- PPL Participants Struggled With Unmet Adult Learning Needs

- Motivation
- Program structure
- Behaviors of faculty facilitators
- Recommendations for program improvement

Theme #1 -- PPL Participants Found Social Support. The following selections illustrate.

"The ropes course was the most beneficial part of the first week. That's when we really got to know people's personalities. It was extremely helpful in breaking the ice."

"The greatest strength of the ropes course is that each person can find their niche....you have all of this mixing and matching...you figure out how to work together....It really does integrate the group very well."

"I remember thinking, here I am, I've never seen these people before, and I'm mentioning things that I haven't mentioned to-- my sister! It was weird, but it was nice, too. I had some painful stuff, and I shared it. And it was *nice* knowing that people here knew about it and I felt that by the time we *shared* you *knew* people and it was nice that somebody *cared*. I mean, here we are getting ready to start med school and if you fell apart and couldn't do it these people could kind of identify with you." (emphasis original)

"It made me look at people differently and say, 'I need to stop, when I first meet somebody-- establish no judgment about them'."

"(Our PPL group) had a (focused topic) meeting about diversity. But it was one of the more awkward meetings...like nobody could talk about it. You could just tell, there were some people who weren't really into it at all. I guess because it wasn't really a concern of theirs anyway. I mean, if you're white male, it's probably not a concern..." (from a female African-American)

"I was pleasantly surprised when I met a lot of my classmates, because it seemed they were more like me than I thought they were going to be...people were very similar to me...makes you feel more comfortable."

"...the mere fact that our picture -- our composite-- is in every single department (office) that you go to! I've had very good experiences with faculty...they like to speak to you while you're walking to your car-- not about school, but about other things. It's a very comfortable environment. and I know if I ever needed their help in other ways, outside of school, they would help."

"I've been to both of my PPL leaders' houses (for dinner)."

Theme #2 -- PPL Participants Found Academic Support. These selections illustrate:

"It was *wonderful* for...getting together...and studying, because you're *really stressed* by that first gross (anatomy) lab, asking what in the world should you do for tomorrow's class." (emphasis added)

"I called my PPL group together at a time when I was having trouble academically, and they were there for me then. And they were very supportive. I appreciated that. It helped a lot...and they would come up to me, and ask how I was doing, or crack a joke, and know that I had somebody to talk to. That was good."

"One of the best features of our class is that we try and help each other out. And I don't feel the competitiveness that I think a lot of other medical schools have problems with."

"Our group leader...put us at ease, and told us, 'It's going to be challenging, but you stick together.' She was more of a support role. She didn't say it was going to be easy."

"I was having problems at the beginning of the semester, and (one of my facilitators) said, 'Hey, we'll talk-- just give me a call.' She gave me her home telephone number -- she said to call anytime....she was just wonderful."

Theme #3 --PPL Participants Struggled With Unmet Adult Learning Needs. Of the three major themes emerging from the focus group data-- that students found social support, they found academic support, and that they struggled with unmet needs as adult learners-- this last theme received the greatest amount of commentary. Although students identified many positive aspects of the PPL program, they cited a wide range of issues which had affected their adjustment negatively. Students eagerly offered suggestions for continued refinements of the program and reported having polled their peers prior to the focus group interviews. The following sub-themes emerged from the theme of unmet needs: motivation, program structure, behaviors of faculty facilitators, and recommendations. The following quotations illustrate student views.

"I'm married, and I have my husband to share things with, and I have some friends, that I share things with...so that's my little network. I don't have to go out into the PPL arena, because I have another network."

"There are some people who already had established things that they wanted to do with their time, and a lot of them were sitting around (during focused topic meetings) like, okay, I'm in here, doing this, and I want to be doing-- something else!"

"I think they ought to make it a little more flexible...especially if it lasts until seven...it can really cause some conflict."

"For some people, if they're introverted, they probably thought the ropes course was very stressful, just having to be out there and doing it, first, and doing it in front of people you don't know, second. And then having to sit in the middle of a room and talk to the people-- again! Well, some people adjust differently. And some people, they have to spend time pretty much by themselves, and get a view of everything, before they're willing to...try to talk to people....If it just wasn't so-- forced."

"They described every single class we were going to have the first year. I thought it was a *complete* waste of time! We didn't even have our schedule books! I mean, that's what I wanted-- I wanted my schedule, so I'd know what my week was going to be like. And so we could discuss it that whole evening. But no, they wouldn't give us our schedule until Friday. I was *furious*!" (emphasis original)

"Definitely I would not scrap what PPL stands for, as far as, here's a group of people, you've got to make it work...I like what PPL stands for."

Of all the sub-themes which emerged from the data, the sub-theme of counter-productive and non-supportive behaviors on the part of faculty facilitators received the most attention. Beyond issues of personal motivation and issues related to program structure and implementation, faculty influences were seen as critical elements of the program. These excerpts illustrate:

"I think what most people are griping about...is, what is this going to be like? and what am I going to be doing for the next year? as opposed to, what am I going to be doing in five years? I really don't care about my residency right now. And that's really the only thing they can tell us about, is what it's like to be a woman doctor, or what it's like to be a family physician in (town and state). Which is *not* my concern right now. Not the first week of class. It was, how is class? and, how much are we really going to have to study?" (emphasis original)

"I felt like the facilitators should have facilitated more good things, because as it turned out...when we vented all our frustrations about all the work, the only response *they* had was, 'Ha-ha-ha, it's only going to get worse!' One of the group leaders told me, which I really resented, 'Well, don't worry, you need to get used to this, because even after you become a physician it'll be the same way-- you won't have any free time.' And so she was depressing me beyond belief, because this was the *first* week; I was having no free time, and then she was saying...and I felt like, gee, why am I here?"

"(some PPL facilitators) were just sort of-- doing their job, like, they would never think of giving us their home numbers! and telling us to call them....(but) just knowing Dr. X, meeting her and everything, she really is that way, you know. She *really* is caring, really is concerned.....One of my group leaders failed to show up at least half the time! And so

obviously it *wasn't* as important to her....I don't know how they pick the leaders, or if they volunteer to do it, because it just didn't seem like (my faculty leaders) *enjoyed* doing it....It's so important to have people like Dr. X to influence the students' value system, even as far as it pertains to medical school and how our lives are changing, and that kind of thing."

"We were *over-facilitated*-- in the first few days. I mean, the group was definitely run by one of our advisors. The other one kind of sat back and didn't do anything. But, as students, we weren't equals. I think it would have been better if we had been kind of pushed in the direction that she wanted us to go, but not necessarily, 'this is the way we're going to do--' everything! Because then we were all a little bit more quiet, and weren't quite as open."

Recommendations from Students

As mentioned earlier, students who shared their thoughts about the PPL program were very positive about most aspects of the program. They had difficulty with other aspects. They wanted to contribute suggestions on how the program could be strengthened, for they appreciated the program and felt that the medical school faculty in general demonstrated commitment and caring. Students felt that the benefits of the PPL program outweighed its shortcomings. They offered numerous suggestions, which are excerpted below.

"Make it voluntary. Give people a chance to say what they want to do. It might only be five people, but those people would feel more committed to it because they had the choice."

"(I'd suggest) social stuff during the first week. We had a lot of time then that we were just sitting around the room. You can get to know people better *outside* of school."

"I think we would have been a little bit more open to it if it weren't (so many hours at night) the first couple of weeks. And, (have the groups meet) an hour at lunch."

Faculty Facilitators

Secondarily, the study sought to explore perceptions of faculty facilitators of the PPL program. The faculty survey questionnaire presented twelve statements with which the faculty were asked to indicate their level of agreement or disagreement. They also were invited to respond to several open-ended questions. A Likert scale was used for the statements, with

response options ranging from Strongly Disagree (1) through Strongly Agree (5). The following statements were used: The Personal, Professional, and Leadership Development Program--

1. Promotes positive peer communication.
2. Enhances self-insight in students.
3. Fosters students' confidence in their ability to succeed in school.
4. Fosters a positive peer social support network.
5. Promotes a sense of community for students and faculty.
6. Provides an effective medium to foster faculty-student interaction.
7. Fosters awareness of diversity issues (race, gender, culture, age).
8. Helps reduce competition among students.
9. Encourages cooperative learning activities.
10. Is a good way for faculty to model desirable professional behaviors.
11. Is a good way to model a balanced personal life/career.
12. Is a valuable agent of socialization for our students.

The survey questionnaire was sent to all 16 faculty facilitators with a cover letter and informed consent form. Twelve facilitators sent usable responses; another failed to sign the consent form and was eliminated from the sample. Overall, the respondents expressed agreement that the program was effective (average rating 4.0). The most widely agreed-upon statement addressed the effectiveness of the program in fostering peer support (4.42), followed by the statements on sense of community (4.33) and positive faculty-student interaction (4.33). Three statements encountered disagreement-- three respondents disagreed with the statement about reduced competition (3.33); and the items on self-insight (3.92) and confidence to succeed (3.50) also received one "disagree" response each.

Through their written comments, faculty facilitators affirmed the value of the PPL program as an important agent of social support and academic support. They acknowledged some of the structural problems the students reported. They also were aware that non-supportive behaviors by some faculty undermined the effectiveness of the program. Overall, faculty and student perceptions were most consistent in relation to issues of social support, academic support, and program structure and implementation. Less consistency between faculty and students was found in relation to areas categorized by the researcher as unmet adult learning needs.

Significance and Implications of this Study

The research data demonstrated that although the PPL program provides a number of important benefits to first-year medical students, it lacks several elements which are fundamental to adult education programming. For example, no evidence was found to suggest that a needs assessment was conducted as a way to (1) demonstrate interest in these learners as individuals and thereby to (2) determine their concerns, values, priorities, and general characteristics. The needs of those who participated in the program were not assessed nor were the needs of those who dropped out of the program. The findings of the focus groups can be taken as a type of retrospective needs analysis and incorporated in future programming endeavors.

For introverted students, successful adjustment to medical school might take the form of a quieter, slower, more reflective experience with only occasional structured PPL group functions. For introverted students, a busy orientation week crowded with new people in totally new surroundings probably compounded the stress they already were experiencing. According to Keirsey and Bates (1978), introverted persons need quiet places and solitary activities in order to renew their energy and can become quite exhausted by continual interaction with others. As introverts comprise only about 25% of the population it is not surprising that many programs are

devised which address the needs of the extravert majority. However, in the case of the PPL program, data are collected on the medical students so that their MBTI profiles are a matter of record. The findings of this research can provide an impetus to including temperament data in future programming. Possibilities for modification to the PPL program might include scheduling some group exercises later, after students have had more time to become acquainted; querying students as to their preferences for program activities and changing it accordingly; and loosening the structure of the program to provide more flexibility.

The focus group respondents expressed little interest in the issue of diversity. Perhaps their apparent apathy is the result of feeling pressed by more immediate concerns such as passing courses. By their own accounts first-year medical students are not yet at a point in their career development where they are even thinking about patient care. The "teachable moment" has not arrived. Because they are so concerned with surviving their basic science courses, it might be advisable to delay discussions on diversity until students begin to work with patients in the clinical setting. Encountering the needs of persons with diverse racial and sociocultural backgrounds and lifestyles may remind students that patients deserve respectful, competent care. At such a time a PPL group discussion on diversity might be more relevant and valued. An understanding that many patients feel "different" and "not part of the scene" upon entering the unfamiliar health care system is vital to physician training. Here lies an important lesson in compassion and respect for diversity.

Numerous references were made to the role of faculty facilitators as agents of socialization and adjustment. The success of the PPL program depends to a great extent upon the expressed attitudes and behaviors of those faculty who spend time with the students in their PPL groups. The behaviors of some facilitators suggested that they have fallen prey to cynicism and burnout;

that they are unable or unwilling to give of themselves; and that they lack group process and leadership skills. Faculty development activities may improve group process skills but may not necessarily result in a change in attitude.

The findings of this research suggest that some faculty do not model the noncognitive attributes deemed important in physicians. While important needs of students for academic and social support are met, additional needs of these medical students are ignored-- such as timely provision of information they consider important, and respect for personal time. These unmet needs diminish the effectiveness of the program, as demonstrated by the failure of most PPL groups to remain intact following the first semester of medical school. The program was designed to foster a four-year affiliation among each group. Yet a number of faculty facilitators have shown limited interest in continued involvement with the program, and other faculty have declined to participate at all.

The negative faculty attitudes and behaviors described by students suggest that perhaps the organization as a whole embraces a tradition, philosophy and value system which contradicts the philosophy underlying the PPL program. Academic medical centers typically require a great deal of faculty, particularly their clinician faculty. Not only must they teach, serve on committees, conduct research, apply for and execute grants, and publish. They also must contribute to the faculty practice plan as well. In this capacity clinician faculty must take turns on call at night, on weekends and on holidays; supervise residents; cover outpatient clinics; and oversee the care of patients in the hospital-- including intensive care. Also they confront the pressure to achieve tenure and promotion. That faculty reveal to students their fatigue and feelings of being overwhelmed is not surprising.

Perhaps an organizational culture audit would be useful. Once faculty and administrators are aware of the undercurrents which affect their individual and collective efforts, further attempts to strengthen this type of student development program may be more effective. In the meantime, a program of awareness training might be helpful. Activities might include content on group process, leadership, adult education principles, and humanism. In the words of one student, "The PPL program has a lot of potential; it just hasn't arrived yet."

Conclusion

The findings of this study provide insight into an understanding of phenomena that affect the personal, professional, and leadership development of entering medical students. The use of intentionally structured, faculty-facilitated small groups was found to help normalize stressful thoughts and feelings, provide support and reassurance, and (in most instances) replace a potentially adversarial perception of faculty with one of caring and approachability. The findings added to the body of knowledge about how the vital process of adjustment, as a preliminary step in the preparation of humanistic health care providers, is achieved. The potential exists for devising more effective interventions to support and facilitate humanistic education and health care delivery.

References

Barton, D. (1995). Stress and adaptation in learning and practicing medicine. Academic Psychiatry, 19, 34- 43.

Brown, R., Edwards, J., & Rounds, L. (1992). Medical students' decisions to report classmates impaired by alcohol or other drug abuse. Academic Medicine, 67, 12.

Coleman, M. (1985). Foreword. In Virshup, B., Coping in Medical School. New York: W. W. Norton & Co., Inc.

Coulehan, J., Williams, P., Landis, D., & Naser, C. (1995). The first patient: reflections and stories about the anatomy cadaver. Teaching and Learning in Medicine, 7, 1, 61-66.

Crandall, S., Volk, R., & Loemker, V. (1993). Medical students' attitudes toward providing care for the underserved. JAMA, 269, 2519-2523.

Davies, S. M., Rutledge, C., & Davies, T. (1993). A family physician-counselor program for medical students. (1993). Family Medicine, 25, 327-330.

Dickstein, L., & Elkes, J. (1987). Health awareness and the medical student: a preliminary experiment. Advances, 4, 11-23.

Horne, D. J., Tiller, J., Eizenberg, N., Tashevska, M., & Biddle, N. (1990). Reactions of first-year medical students to their initial encounter with a cadaver in the dissecting room. Academic Medicine, 65, 645-646.

McKegney, C. P. (1989). Medical education: a neglectful and abusive family system. Family Medicine, 21, 452-457.

O'Neil, E. H. (1993). Health professions education for the future: schools in service to the nation. San Francisco, CA: Pew Health Professions Commission.

Phelan, S., Obenshain, S., & Galey, W. (1993). Evaluation of the noncognitive professional traits of medical students. Academic Medicine, 68, 799-803.

Plaut, S. M., Maxwell, S., Seng, L., O'Brien, J., & Fairclough, G. (1993). Mental health services for medical students: perceptions of students, student affairs deans, and mental health providers. Academic Medicine, 58, 360-365.

Stillman, P., Regan, M., Swanson, D., Case, S., McCahan, J., Feinblatt, J., Smith, S., Willms, J., & Nelson, D. (1990). An assessment of the clinical skills of fourth-year students at four new england medical schools. Academic Medicine, 65, 320-326.

Swick, H. M., Simpson, D., & Van Susteren, T. (1995). Fostering the professional development of medical students. Teaching and Learning in Medicine, 7, 55-60.

Virshup, B. (1985). Coping in Medical School. New York: W. W. Norton & Co., Inc.

Puckett, A., Graham, D., Pounds, L., & Nash, F. (1989). The duke university program for integrating ethics and human values into medical education. Academic Medicine, 64, 231-235.